

**Myeloperoxidase Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14319C****Specification**

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**Myeloperoxidase Antibody (Center) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">P05164</a>
Other Accession	<a href="#">NP_000241.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	83869
Antigen Region	420-448

**Myeloperoxidase Antibody (Center) - Additional Information****Gene ID** 4353**Other Names**

Myeloperoxidase, MPO, Myeloperoxidase, 89 kDa myeloperoxidase, 84 kDa myeloperoxidase, Myeloperoxidase light chain, Myeloperoxidase heavy chain, MPO

**Target/Specificity**

This Myeloperoxidase antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 420-448 amino acids from the Central region of human Myeloperoxidase.

**Dilution**

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Myeloperoxidase Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**Myeloperoxidase Antibody (Center) - Protein Information**

**Name** MPO ([HGNC:7218](#))

**Function** Part of the host defense system of polymorphonuclear leukocytes. It is responsible for microbicidal activity against a wide range of organisms. In the stimulated PMN, MPO catalyzes the production of hypohalous acids, primarily hypochlorous acid in physiologic situations, and other toxic intermediates that greatly enhance PMN microbicidal activity (PubMed:[9922160](#)). Mediates the proteolytic cleavage of alpha-1-microglobulin to form t-alpha-1-microglobulin, which potently inhibits oxidation of low-density lipoprotein particles and limits vascular damage (PubMed:[25698971](#)).

**Cellular Location**

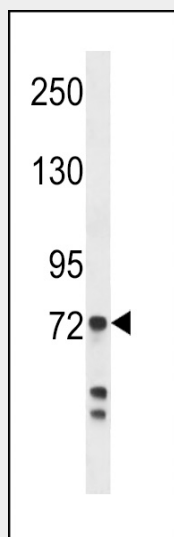
Lysosome.

**Myeloperoxidase Antibody (Center) - Protocols**

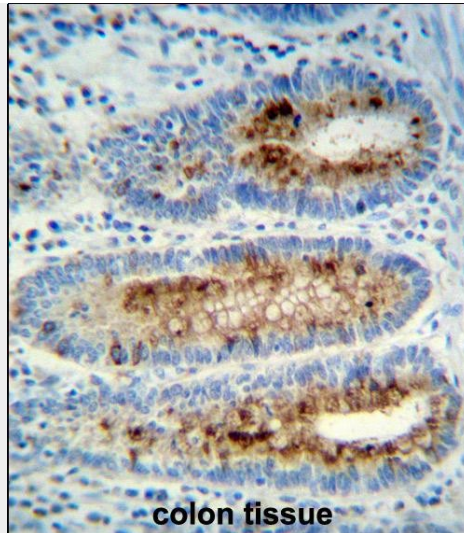
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Myeloperoxidase Antibody (Center) - Images**



Myeloperoxidase Antibody (Center) (Cat. #AP14319c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the Myeloperoxidase antibody detected the Myeloperoxidase protein (arrow).



Myeloperoxidase Antibody (Center) (Cat. #AP14319c) immunohistochemistry analysis in formalin fixed and paraffin embedded human colon tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Myeloperoxidase Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **Myeloperoxidase Antibody (Center) - Background**

Myeloperoxidase (MPO) is a heme protein synthesized during myeloid differentiation that constitutes the major component of neutrophil azurophilic granules. Produced as a single chain precursor, myeloperoxidase is subsequently cleaved into a light and heavy chain. The mature myeloperoxidase is a tetramer composed of 2 light chains and 2 heavy chains. This enzyme produces hypohalous acids central to the microbicidal activity of neutrophils. [provided by RefSeq].

#### **Myeloperoxidase Antibody (Center) - References**

Banerjee, M., et al. Toxicol. Appl. Pharmacol. 249(1):47-54(2010)  
Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)  
Nahon, P., et al. Antioxid. Redox Signal. (2010) In press :  
Wang, Y., et al. J. Huazhong Univ. Sci. Technol. Med. Sci. 30(4):437-442(2010)  
Hua, F., et al. Zhongguo Fei Ai Za Zhi 13(2):122-127(2010)